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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,241	06/24/2003	Michael John Tzivanis	P-6017-D1	5633

24492 7590 09/24/2004

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EXAMINER

HUNTER, ALVIN A

ART UNIT	PAPER NUMBER
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3711

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,241

Applicant(s)

TZIVANIS ET AL.

Examiner

Alvin A. Hunter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-23 and 25-32 is/are pending in the application.
- 4a) Of the above claim(s) 13-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-23 and 25-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

DETAILED ACTION

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 13-20, drawn to a treatment of adhesion, classified in class 473, subclass 351.
- II. Claim 21-32, drawn to a game ball having enhanced adhesion, classified in class 473, subclass 351.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case Invention I does not require a silicone-based adhesion promoter to carry out the invention.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Michelle Bugbee on September 20, 2004 a provisional election was made without traverse to prosecute the invention of Group II, claims 21-32. Affirmation of this election must be made by applicant in replying to this

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Office action. Claims 13-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21-23, 26, 28, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Sullivan et al. (USPN 61259110).

Regarding claim 21, Sullivan et al. discloses a game ball having enhanced interlayer adhesion comprising a first layer having a bonding surface, the bonding surface having an adhesion improvement treatment comprising treating the bonding surface with a silicone-based adhesion promoter and a second layer having a surface joined to the bonding surface, wherein the silicone-based adhesion promoter is a silsesquioxane oligomer (See Column 2, lines 40 through 47, and Column 28, lines 24 through 30).

Regarding claim 22, Sullivan et al. discloses the game ball being a golf ball.

Regarding claim 23, Sullivan et al. discloses one of the first or second layers is a golf ball mantle comprised of a material selected from at least one of polyurethane, ionomer, terpolymer, metallocene catalyzed polyolefin, polyamide block copolymer and polyester/polyether block copolymer and the other of the first or second layers is a golf ball cover comprised of a material selected from at least one of polyurethane, ionomer,

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terpolymer, metallocene catalyzed polyolefin, polyamide block copolymer and polyester/polyether block copolymer (See Column 2, lines 48 through 60).

Regarding claim 26, Sullivan et al. discloses the treatment further comprises post treatment of the game ball at an elevated temperature for a predetermined amount of time (See Columns 34 through 36).

Regarding claim 28, Sullivan et al. discloses a process for improving adhesion strength between a first and second layer comprising treating the first layer with a silicone-based adhesion promoter and joining the second surface to the first surface (See Entire Document).

Regarding claim 30, Sullivan et al. discloses the silicone-based adhesion promoter is a silsesquioxane oligomer (See Column 2, lines 40 through 47, and Column 28, lines 24 through 30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 61259110).

Regarding claims 25 and 31, Applicant does state why a particular silsesquioxane oligomer is critical in order to attain the invention. One having ordinary

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skill in the art would have found such to be an obvious matter of design choice. Any type of silsesquioxane or silicon based composition as disclosed by Sullivan et al. would perform equally as well because it promotes adhesion.

Claims 27, 29, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan et al. (USPN 6159110) in view of Maruko (USPN 6071201) and Kitaoh et al. (USPN 4871589).

Regarding claim 27, 29, and 32, Sullivan et al. does not disclose roughing a bonding surface or plasma treating a bonding surface. Maruko discloses a golf ball having a layer roughened in order to increase the adhesion between two layers (See Column 4, lines 55 through 64). One having ordinary skill in the art would have found it obvious to roughen a surface, as taught by Maruko, in order to further promote adhesion. Kitaoh et al. discloses a golf ball wherein a layer is plasma treated (See Background of the Invention). One having ordinary skill in the art would have found it obvious to plasma treat a surface, as taught by Kitaoh et al., in order to further promote adhesion.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is 703-306-5693. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Vidovich, can be reached on 703-308-1513. The fax phone

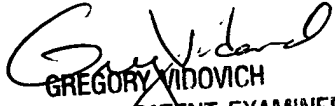
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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AAH

Alvin A. Hunter, Jr.


GREGORY VIDOVIK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700